

On the Importance of Establishing the Discipline of Chinese Herbal Medicine for Disinfection and Epidemic Prevention

Chenxue Wu

Beijing RoselleBio Science & Technology Institute, China

Shenzhen RoselleBio Technology Holding Ltd., China

rosellebio@126.com

Abstract

Chinese Herbal Medicine Disinfection and Epidemic Prevention technology is the crystallization of the profound wisdom of Chinese nation and a way to contact with Western civilization. Establishing the subject of “Chinese Herbal Medicine Disinfection and Epidemic Prevention”, developing and promoting “Chinese Herbal Medicine Disinfection and Epidemic Prevention” products, and training relevant professionals are key measures to control epidemic disease and ensure life safety. “Chinese Herbal Medicine Disinfection and Epidemic Prevention”, a new therapy that can not only eliminate virus, but also promote human / organism cell repair and enhance immunity, is a new way to prevent and treat cancer with great social value. Creating the subject of “Chinese Herbal Medicine Disinfection and Epidemic Prevention” and popularizing the knowledge have epoch-making significance. This paper reviews the importance of establishing the discipline of “Chinese Herbal Medicine Disinfection and Epidemic Prevention”. Based on the existing “Chinese Herbal Medicine Disinfection and Epidemic Prevention” achievements, gradually transform research achievements horizontally and vertically, to cultivate young professional generation in the field. At the same time, further study excellent formulas of Chinese herbal medicine, break through the barriers, protect and inherit good inscriptions, innovate and improve technologies, optimize technical achievements, always lead ahead the growth and mutation of bacteria and viruses, and develop “Chinese Herbal Medicine Vaccine”.

Key words Chinese Herbal Medicine Disinfection and Epidemic Prevention, Chinese Herbal Medicine Liquid Scalpel, Chinese Herbal Medicine Oral Vaccine, Human / organism Disinfection, Blood Disinfection, Internal Organ Disinfection, Respiratory Tract Disinfection, Toothy Oral Solution; immune mechanism

Introduction

Chinese traditional herbal medicine technology, “different but harmony”, is the crystallization of the profound wisdom of Chinese nation. Its medical theory integrates the concepts of Benevolence, Ritual, Harmony and Treatment. Establishing the discipline of “Chinese Herbal Medicine Disinfection and Epidemic Prevention” and promoting the integrity and innovation of broad-spectrum “Chinese Herbal Medicine Disinfection and Epidemic Prevention” technology is needed by society in the post-COVID-19 epidemic era since 2020. Promoting traditional Chinese medicine

epidemic prevention technology is one measure to protect safety of all countries and maintain world peace.

As an old Chinese saying goes, “hundred years of ingenuity, thousands of years of inheritance”, Chinese herbal medicine has a long history of healing and saving people. Countless Chinese herbal medicine practitioners worked hard just like “paving ways in mountains, building bridges by water”, to continue to improve themselves by creating innovative ways for the development of Chinese herbal medicine in the new era. The clinical research and development of Chinese Herbal Medicine Disinfection and Epidemic Prevention technologies are particularly outstanding in the history of Chinese herbal medicine development.

The next section addresses re-knowing disinfection and epidemic prevention. It is followed by Toothy Oral Solution, a Chinese Herbal Medicine Disinfection and Epidemic Prevention Preparation; I ends with the Conclusion section.

1. Re-knowing Disinfection and Epidemic Prevention

Disinfection and Epidemic Prevention can be reclassified into Environmental Disinfection and Epidemic Prevention and Human/organism Disinfection and Epidemic Prevention. However, Human/organism Disinfection and Epidemic Prevention includes Body Surface Disinfection and Epidemic Prevention and Internal Body Disinfection and Epidemic Prevention. Internal Body Disinfection and Epidemic Prevention includes human/organism blood, internal organs, respiratory tract, mucous membranes and other tissues disinfection. Re-understanding the theory of disinfection and epidemic prevention, creating the discipline of Chinese Herbal Medicine Disinfection and Epidemic Prevention, and popularizing the knowledge of this discipline have epoch-making significance.

1.1 Environmental Disinfection and Epidemic Prevention

Environmental disinfection refers to use physical methods, chemical methods or biological methods to kill pathogenic microorganisms on objects and in environment. It is an important measure to prevent and extinguish various infectious diseases. Disinfection can eliminate harmful pathogenic microorganisms in the environment of animal growth, cut off various ways of spreading pathogenic microorganisms, thereby preventing various infectious diseases (Guo, 2017). The purpose of using disinfectants/medicine is to kill pathogenic microorganisms on objects and in environment for diseases control. There are various types of often used chemical disinfectants. The commonly used chemical disinfectants are mainly phenols, aldehydes, alcohols, acids, alkalis, chlorine preparations, iodine preparations, heavy metal salts, surfactants and other types of disinfectants. With a large-scale application of various chemical disinfection products and disinfection and sterilization equipment, they help in the control of infection and infectious diseases, but after a period of time, its side effects gradually appear, and harmful reactions to human body begin to increase. Using these chemical disinfectants, it is easy to cause irritation and harm to operators or targets (Liu et al., 2017). These chemical disinfectants have various side

effects such as environmental pollution, drug residues, drug resistances, and toxins. These disinfectants can not contact with human body directly. If a large number of chemical disinfectants are applied to humans, animals and the environment, serious consequences may occur. The irreversible damages may also lead to mutations of bacterial and virus genes, resulting in super bacteria and super viruses, and endanger the sustainable development of mankind and environment. Therefore, different environments and different objects should use different disinfectant preparations. Application of various chemical disinfection products and disinfection and sterilization equipment for environmental disinfection alone is not enough for diseases and epidemic prevention and control, as these methods are limited and unsustainable. Compared with the hazards and limitations of these chemical disinfectants and disinfection and sterilization equipment, “Chinese Herbal Medicine Disinfection and Epidemic Prevention” products may compensate as they are all natural plant extractions, non-polluting and non-irritating to environment and human body. “Chinese Herbal Medicine Disinfection and Epidemic Prevention” products are safety, efficiency with high economic value and social value meet the urgent needs of people today. In line with the current development trend, to establish the discipline of “Chinese Herbal Medicine Disinfection and Epidemic Prevention”, develop and promote “Chinese Herbal Medicine Disinfection and Epidemic Prevention” products, and train relevant professionals are key measures to sustainable development and ensure life safety.

1.2 Chinese Herbal Medicine Human/organism Disinfection and Epidemic Prevention

The meaning of Chinese Herbal Medicine Human/organism Disinfection and Epidemic Prevention: it refers to use one or more tested safe and non-toxic Chinese Herbal Medicine Disinfection and Epidemic Prevention Preparations to humans/organisms to kill harmful pathogenic micro organisms inside and outside humans/organisms body by eliminating harmfulness, cutting off spreading ways, changing cell environment in which pathogenic microorganisms live, repairing human/organisms cells, enhancing human immunity, promoting cell self-repair ability, and excreting toxins from the body, thereby prevent and treat various infectious diseases. Chinese Herbal Medicine Human/organism Disinfection and Epidemic Prevention includes the disinfection and epidemic prevention of blood, internal organs, respiratory tract, mucous membranes and other tissues. It has a huge impact to establish the “Chinese Herbal Medicine Disinfection and Epidemic Prevention” discipline and promote relevant products.

The establishment of the discipline of “Chinese Herbal Medicine Disinfection and Epidemic Prevention” aims to enrich discipline system, gather expert teams and high-quality R&D personnel to carry out in-depth scientific research on mechanism studies, to inherit and carry forward relevant products, to focus on inheritance, excavation and protection of Chinese traditional herbal prescriptions and prescriptions, to establish and explore basic medical theories, to gather international epidemic control data and clinical efficacy verification theoretical basis, and to transform relevant research results. It is of great significance to realize patenting,

productization and industrialization of “Chinese Herbal Medicine Disinfection and Epidemic Prevention”.

1.3 The theory of “Chinese Herbal Medicine Liquid Scalpel”

The theory of “Chinese Herbal Medicine Liquid Scalpel” derived from Chinese Herbal Medicine Human/organism Disinfection and Epidemic Prevention system is a new method for the prevention and treatment of tumors and cancers in human body. “Chinese Herbal Liquid Scalpel” means to drink, spray, smear or target Chinese Herbal Medicine Disinfection Liquid on cancer tissues to destroy the growth environment of virus and cancer cells, which called disinfection procedure first, and then this disinfection procedure blocks the replication and growth of viruses, prevents virus adsorption and penetration, enhance the anti proliferative effects of fine cells, rapidly sheds cancer tissues, and promotes cell repairs. “Chinese Herbal Liquid Scalpel” helps to repair and strengthen immune system so that to improve adverse reactions caused by cancer cells. This comprehensive effects of targeting cancer tissues, eliminating tumors and repairing human bodies are vividly compared as “Chinese Herbal Medicine Liquid Scalpel” to cut off tumors or cancers.

Tumors are new organisms formed by tumor cells that proliferating and forming by cytoplasm of body tissues under actions of various carcinogenic factors (Chen, 1992). A variety of actors lead to the occurrence of cancer. Chemical substances and viral infections have been recognized as the factors that cause cancer. If the DNA (deoxyribonucleic acid) in a normal cell is damaged by chemical substances, when the damages cannot be repaired, these damages can cause irregular divisions and finally cause cancer. Cell damages in this case requires a “Promoting Facilitator” which can promote cell repairs; if normal cells are affected by pathogenic microorganisms, they are expressed as viruses caused Carcinogenesis. The mechanism of virus carcinogenesis has been clarified, by dividing into DNA viruses caused type and RNA viruses caused type. The genetic factors of all organisms have DNA casts, which are synthesized by RNA (ribonucleic acid), and proteins are synthesized on the basis of RNA. The RNA virus is a retrovirus that uses RNA as a mold and has the ability to produce DNA enzyme (reverse transcriptase). In retroviruses that can cause cancer, DNA recombination has embedded carcinogenic factors into the RNA of the virus, so that DNA viruses have the possibility of causing cancer.

The latest research results of Cai Qiliang’s team from Medical Molecular Virology of Fudan University of Basic Medicine, a Key Laboratory of China Health Commission and China Education Ministry, entitled “Viral-mediated AURKB Cleavage Promote Cell Segregation and Tumorigenesis” revealed a virus-mediated regulation of AURKB proteolytic cleavage Mechanism and its important regulatory role in inducing malignant proliferation of host cells. According to research statistics, more than one-fifth of tumors worldwide are related to viral infections. Among them, human γ -herpesvirus (KSHV and EBV) infection is closely related to the occurrence of various malignant tumors such as lymphoma, skin tumors, AIDS, etc, a main cause of people with immunodeficiency (Zhu et al., 2019).

Chinese Herbal Liquid Scalpels have unique advantages in solving viral cancers. The main advantages of Chinese Herbal Liquid Scalpels are safety, no toxic side

effects, no drug resistance, no need for anesthesia, and almost no pain. After years of clinical use, especially for cancers that can be directly administered, such as oral cancer, esophageal cancer, gastric cancer, spout cancer, Kaposi's sarcoma etc, Chinese Herbal Liquid Scalpels have eradicated resections and immediate repairs for mucosal tissues. The costs are relatively low. Promoting "Chinese Herbal Liquid Scalpel" therapy that can eliminate viruses, repair cell damages and enhance immunity is a new way against tumors and cancers indicating Chinese traditional medical theory of "prevent and cure disease at the same time". Therefore, enriching relevant theoretical system of "Chinese Herbal Liquid Scalpel", cultivating professionals in industry, and promoting this new therapy, have broad market prospects and social value for tumor and cancer prevention and treatment.

2. Toothy Oral Solution, a Chinese Herbal Medicine Disinfection and Epidemic Prevention Preparation

2.1 Introduction of Chinese Herbal Medicine Disinfection and Epidemic Prevention Preparation Toothy Oral Solution

Toothy Oral Solution, a Chinese Herbal Medicine Disinfection and Epidemic Prevention Preparation is made from more than 10 kinds of edible and commonly used anti-virus plants, such as *houltuynia cordata*, snow chrysanthemum, honeysuckle, cockscomb etc. These edible plants are not only used to kill viruses, but also used to enhance human immunity. Toothy formed by Chinese ancient concocting methods and unique modern extraction technology, is molecular liquid. This molecular liquid can be directly absorbed by body fluids and cells through human oral cavity, nasal cavity, throat and intestinal mucosa. Toothy, a Chinese Herbal Medicine Disinfection and Epidemic Prevention Preparation, is rich in organic substances such as alkaloids, berberine, flavonoids and organic acids, which can inhibit and inactivate viruses and bacteria. These substances can change cell environment in which viruses and bacteria live and devitalize them. These substances in the molecular liquid can improve human immunity and promote cell self-repair ability to excrete toxins from body.

In 2003, Toothy Chinese Herbal Medicine Disinfection and Epidemic Prevention Preparation was tested by China Institute of Microbial Epidemiology Academy of Military Medical Sciences, diluted with water to a concentration of 1%, has a complete inhibitory effect on the SARS virus, with a therapeutic index of 16 (Wang et al., 2003). In 2019, Toothy was researched and tested by Henan Provincial Clinical Research Center for AIDS Prevention and Treatment of Traditional Chinese Medicine to be a Chinese herbal medicine antiviral preparation that can inactivate HIV virus (Guo et al., 2019). Toothy is a broad-spectrum Chinese herbal medicine disinfectant and anti-epidemic agent that can inactivate both SARS virus and HIV virus (Wang et al., 2003, Guo et al., 2019). Sufficient human clinical researches and viruses tests have proved that Toothy Chinese herbal medicine ingredients can inhibit and inactivate bacterial fimbriae and virus spikes, and can deactivate them quickly (Guo et al., 2019).

2.2 Therapeutic mechanism of Toothy Chinese Herbal Medicine Disinfection and

Epidemic Prevention Agent

Toothy Chinese Herbal Medicine Disinfection and Epidemic Prevention Agent is a standardized Chinese Herbal Medicine Disinfection and Epidemic Prevention product for Human / organism disinfection, Blood Disinfection and Internal organ disinfection, which also can be called “Chinese Herbal Medicine Oral Vaccine”.

Toothy, a broad-spectrum Chinese herbal antiviral technology product that can simultaneously inactivate SARS virus and mRNA HIV viruses (Wang et al., 2003, Guo et al., 2019), has been clinically used in mothers, infants, children, and HIV-infected patients for many years. It was used for preventing and curing COVID-19 virus in Hubei, China during the COVID-19 epidemic in the year 2020. Toothy was widely used in the epidemic prevention and treatment of people in at least nine epidemic hospitals, such as the Third People’s Hospital of Zaoyang City, Hubei Province, Zhongnan Hospital of Wuhan University etc (Popular science and health, 2020). It has achieved clinical success and significant results in disinfect COVID-19 virus in human oral cavity, respiratory tract, and lungs, healing and saving people, which once again confirms that it has value to promote Toothy Chinese Herbal Medicine Disinfection and Epidemic Prevention Agent, especially in epidemic area for its uniqueness, high efficiency, and safety .

Toothy Chinese Herbal Medicine Disinfection and Epidemic Prevention Agent can directly inhibit anti-virus and achieve anti-virus effect through immune mechanism. Toothy Chinese Herbal Medicine Disinfection and Epidemic Prevention Agent is made from selected edible herbs and refined formulas, which can effectively relieve a variety of discomforts. Toothy’s formula pays attention to the plan of “different but harmony”, formulating edible herbs in strict accordance with the differentiation of symptoms and signs. Toothy has complex ingredients, emphasizes comprehensiveness and integrity, is not easy to develop drug resistance, born for treating viral infectious diseases. The effectiveness of Toothy comes from scientific compatibility and exclusive plant extraction patent technology. According to different pathological effects, the multiple active ingredients in Toothy formula can directly kill viruses, promote immune system, and repair cell damages (Fei et al., 2019). Toothy’s formula exerts comprehensive antiviral effects: it is mainly manifested as direct inactivation of viruses, preventing viruses from adsorbing and penetrating, anti-proliferation in cells, promoting immune system development, strengthening immune cells, enhancing humoral immunity, and enhancing macrophage phagocytosis, improving body’s adverse reactions and pathological changes caused by the virus. Toothy is a result of multiple mechanisms to interact with each other (Fei et al., 2019). The honeysuckle in Toothy’s formula has a better inhibitory effect on herpes simplex virus, and the effect is better than that of acyclovir and morpholinoguanidine hydrochloride, and it can increase the tolerance of cells to the environment and prolong cell life (Yan et al., 1998). The rhubarb in Toothy’s formula has been proved by a large number of experiments that the anthraquinones in the rhubarb extract have a direct killing effect on herpes simplex virus (Wang et al., 1996). The interaction and influence between the components of Toothy compound have better antiviral effects and better reflect the dialectical treatment and prescription principles of traditional

Chinese herbal medicine. The current clinical observation of Toothy can be used for oral herpes discomforts, diabetic oral ulcer discomforts, pediatric herpetic pharyngeal discomforts, HIV-infected oral ulcers and other oral and throat discomforts. The current clinical use of Toothy shows that it can effectively alleviate oral viral infections, upper respiratory tract infections caused by influenza viruses, hand, foot and mouth disease, herpes angina, chickenpox virus and other virus caused problems. Toothy has achieved effective results when applied to children with herpetic angina, hand, foot and mouth disease, measles and chickenpox in China and Thailand. Chinese traditional herbal medicine is the quintessence of Chinese nation, which has an irreplaceable effect especially in epidemic control and infectious disease prevention (Fei et al., 2019).

2.3 Application of Toothy Chinese Herbal Medicine Disinfection and Epidemic Prevention Agent

According to random grouping principle, 200 cases of pediatric in-patients in Hengsheng hospital in Shenzhen China from January 2018 to October 2018 were divided into control group and observation group, 100 cases in each group. The control group was treated with ribavirin spray, while the observation group was treated with Toothy spray. The results showed that the clinical effect of the observation group was significantly better than that of the control group, and the difference was statistically significant ($P < 0.05$). The cure time of the observation group was significantly shorter than that of the control group, and the difference was statistically significant ($P < 0.05$). Toothy Chinese Herbal Medicine Disinfection and Epidemic Prevention Agent, a comprehensive antiviral therapy, made from all natural Chinese herbal medicine, can prevent virus adsorption, inhibit virus replication and proliferation and directly kill virus, so as to significantly heal patients, reduce oral herpes and ulcer regression time with no toxins and side effects, which is worthy of clinical application (Fei et al., 2019). Toothy Chinese Herbal Medicine Disinfection and Epidemic Prevention Agent can not only be used in treatment of human diseases, such as varicella on body surface, skin damage, diabetes ulceration, blood and internal organs disinfection, but also has a strong sterilization effect in environment for air disinfection for living space. It is safer for human body, a good choice for children, mothers, infants, the elderly and other vulnerable groups.

2.3.1 Apply Toothy to human / organism disinfection

1, Atomization method: add Toothy one times the volume of water into a atomizer for atomization. The atomizer can be used daily for oral, nasal and respiratory mucosa atomization inhalation, 1-2 times a day, one bottle of Toothy each time. Toothy is directly inhaled through the mouth and nose, which directly acts on the adverse symptoms caused by virus infection. It can inactivate virus, so as to enhance human immunity and fight against discomforts.

2, Spray method: Spray Toothy liquid to oral cavity and throat, 4-5 times a day, 3-4 sprays each time. Do not diet after spraying in 20 minutes. Spray Toothy before bedtime, and it strengthen effects.

3, Daub method: use cotton swab to dip Toothy to daub nasal cavity or the infection part of human body, once an hour, which enhance effects.

4, Drinking method: drink 1-2 bottles per day after meals.

Doctors suggest: in case of infections, apply Toothy immediately into mouth, throat and nasal cavity, the earlier the application, the better.

2.3.2 Apply Toothy for environmental disinfection

1, Fumigation method: it is a traditional method, boiling Toothy with water and diffusing the active ingredients with steam, dispersing the steam evenly into the air. After 30 minutes, the steam moisten and purify the air. The sterilization rate reaches 70% - 75%, and it has no irritation to the skin, mucous membrane and respiratory tract (Chen, 2001).

2, Spray method: by atomizing, Toothy becomes aerosol particles. The particles can reach 20 to 60 μ m, and the diffusion effect is faster and stronger. This method not only has disinfection effects, but also can settle dust, increase humidify and clean air. Studies show Toothy's active ingredients like chrysanthemum indicum and honeysuckle flower have direct anti coxsackievirus CBV3 and CBV5 in vitro. Use these herbs in classrooms can reduce incidence of upper respiratory tract infection in primary school students (Hu et al., 2002).

Toothy Chinese Herbal Medicine Disinfection and Epidemic Prevention Agent is safer to human body and has no corrosive effect to objects, which smells good and freshen the air. The application and study of Toothy Chinese Herbal Medicine Disinfection and Epidemic Prevention Agent in environmental disinfection is not only worthy of research, but also expanding the scope of using traditional Chinese medicine for environmental disinfection.

Conclusion

Take the whole world in view, a man of insight takes the lead to worry about the world. Based on the current epidemic, establishing the discipline of "Chinese Herbal Medicine Disinfection and Epidemic Prevention" and the promoting it becomes a mission of human to maintain health and world peace. As a Chinese medical science and technology, the discipline of "Chinese Herbal Medicine Disinfection and Epidemic prevention" reveals a wisdom of human health development from a systematic and overall perspective, which embodies natural, organic and herbal, pays attention to life and health, and conforms to human benefits.

In Chinese traditional herbal medicine development history, there are good prescriptions in "Chinese Herbal Medicine Disinfection and Epidemic Prevention" field. Beijing RoselleBio Science & Technology Institute initiates the establishment of "Chinese Herbal Medicine Disinfection and Epidemic Prevention" discipline, sets up "Chinese Herbal Medicine Disinfection and Epidemic Prevention" research center, "Chinese Herbal Medicine Oral Vaccine" research center and production bases to gather top scientific research facilities, combine traditional medicine with modern science and technology, improve comprehensive research ability of traditional Chinese medicine industry, build a research platform of traditional Chinese medicine industry, and transform valuable research results. Based on the existing "Chinese Herbal Medicine Disinfection and Epidemic Prevention" achievements, gradually

transform research achievements horizontally and vertically, to cultivate young professional generation in the field. At the same time, further study excellent formulas of Chinese herbal medicine, break through the barriers, protect and inherit good inscriptions, innovate and improve technologies, optimize technical achievements, always lead ahead the growth and mutation of bacteria and viruses, and develop “Chinese Herbal Medicine Vaccine”.

References

Chen, 2001

Chen Li. (2001). Observation on the effect of air disinfectant of traditional Chinese medicine on air disinfection in hospitals. *Chinese medicine orthopedics* (02), 11. doi:CNKI:SUN:ZYZG.0.2001-02-005.

Chen, 1992

Chen Fanghong, Zheng Shu. (1992). Progress in the study of tumor carcinogenesis. *Journal of Practical Cancer* (03), 226-228. doi:CNKI:SUN:SYAZ.0.1992-03-039.

Fei et al., 2019

Fei Hao, Guo Xiaomei, Chen Yongjun, Tan Guifang & Wu Chenxue. (2019). Clinical effect of Chinese herb medicine Yatai mouthwash on herpangina in children. *Chinese Medicine* (12), 1905-1908. doi :.

Guo et al., 2019

Guo Huijun, Sang Feng, et al. In vitro anti-HIV-1 virus activity of traditional Chinese medicine antiviral preparations (Rosellebio anti-hiv Oral Liquid) [R]. Henan Provincial Clinical Research Center for AIDS Prevention and Treatment of Traditional Chinese Medicine, 2019.

Guo, 2017

Guo Tao. (2017). Re-recognize the importance of disinfection. *Rabbit Raising in China* (01), 37-39. doi:CNKI:SUN:ZGYT.0.2017-01-012.

Hu et al., 2002

Hu Xiaohui, Jiang Lianhong, Gao Lan. (2002). Observation on the prevention of upper respiratory tract infection with traditional Chinese medicine air disinfectant. *Zhejiang Journal of Traditional Chinese Medicine* (06). doi:CNKI:SUN:ZJZZ.0.2002-06-033.

Liu et al., 2017

Liu Jun, Wang Jiaqi, Ban Haiqun & Fei Chunnan. (2017). Research progress on irritation and harm of disinfection process to human body. *Chinese Journal of Disinfection* (01), 68-71. doi:CNKI:SUN:ZGXD .0.2017-01-023.

Popular science and health, 2020

Popular science and health. Shenzhen “Toothy Oral Solution” is recognized by the first-line COVID-19 epidemic hospital in Hubei province [EB/OL].

<http://leiyu1228.blogchina.com/822049922.html>, 2020-03-18.

Wang et al., 2003

Wang JY, Zhao YH, Ji XG. In vitro anti SARS-CoV experiment with compound

acid[R]. China Institute of microbial epidemiology Academy of Military Medical Sciences, 2003.

Wang et al., 1996

Wang Zhiyu, Wang Guiting, Xu Hongzhi, Wang. (1996). Anti-herpes virus effect of rhubarb alcohol extract. *Chinese Journal of Chinese Materia Medica* (06).

doi:CNKI:SUN:ZGZY.0.1996-06-018.

Yan et al., 1998

Yan Ming, Wang Yingcai, Xia Dezhao. (1998). Experimental study of compound honeysuckle extract against type I herpes simplex virus. *Chinese Journal of Practical Ophthalmology* (02). doi:CNKI:SUN:ZZZY.0.1998-02- 007.

Zhu et al., 2019

Zhu Qing, Ling Ding, et al. (2019). Viral-Mediated AURKB Cleavage Promotes Cell Segregation and Tumorigenesis. *Cell Reports*(13). doi:10.1016/j.celrep.2019.02.106.